

CLAIMS

1-7. (Cancelled)

8. (Currently amended) A method of mediating an immune response, comprising the step of administering attenuated T-cells to a human, wherein the T-cells are cultured in the presence of natural or synthetic myelin proteins and wherein said human is in need of treatment for multiple sclerosis.

9. (Original) The method of claim 8, wherein the T-cells are derived from autologous peripheral mononuclear cells.

10. (Cancelled)

11. (Original) The method of claim 10, wherein the T-cells are prepared by selecting and expanding T-cells that respond to myelin proteins.

12. (Original) The method of claim 8, wherein the attenuated T-cells are attenuated by irradiation.

13. (Original) The method of claim 8, wherein the T-cells target more than one myelin protein.

14. (Original) The method of claim 8, wherein the T-cells are administered subcutaneously.

15. (Original) The method of claim 8, wherein the T-cells are administered in 4 to 6 week intervals.

16. (Original) The method of claim 8, wherein the T-cells are administered for approximately 18 months.

17. (Original) The method of claim 8, wherein the T-cells are administered in a first dosage of 30×10^6 to 80×10^6 attenuated T-cells.

18. (Original) The method of claim 17, further comprising more than one administered dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up to the point of adverse reactions.

19. (Original) The method of claim 17, further comprising more than one

administered dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up to the point of clinical response.

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Currently amended) The method of claim 8 ~~claim 22~~, wherein said attenuated T-cells are reactive to a plurality of myelin proteins.

24. (Previously presented) The method of claim 23, wherein said plurality of myelin proteins comprises at least two proteins selected from the group consisting of MBP, MOG, PLP, and MAG.

25. (Previously presented) The method of claim 23, wherein said attenuated T-cells are reactive to at least MBP, MOG, PLP, and MAG.

26. (Previously presented) The method of claim 23, wherein said plurality of different myelin proteins are natural myelin proteins.

27. (Currently amended) The method of claim 26 ~~claim 23~~, wherein said natural myelin proteins are bovine myelin proteins.

28. (Previously presented) The method of claim 23, wherein said plurality of different myelin proteins are synthetic myelin proteins.

29. (Previously presented) The method of claim 23, wherein said plurality of different myelin proteins are human myelin proteins.

30. (Currently amended) The method of claim 8 ~~claim 22~~, wherein said attenuated T-cells are prepared by a second method comprising the steps of:

a) obtaining a polyclonal mixture of T-cells;

b) culturing said polyclonal mixture of T-cells;

c) stimulating said polyclonal mixture of T-cells in the presence of a plurality of myelin proteins;

d) expanding said polyclonal mixture of T-cells;

e) repeating steps c and d until selecting a polyclonal subset of T cells wherein said

polyclonal subset of T cells are reactive to at least two myelin proteins; and

f) combining said polyclonal subset of T-cells with a buffer, thereby producing the attenuated T-cells for mediating an immune response in a human.